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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------|-------------|----------------------|---------------------|-------------------------|
| 10/830,070 | 04/23/2004 | Toshiyuki Ebina | EBINA3 | 7689 |
| 1444 | 7590 | 03/09/2005 | | EXAMINER |
| BROWDY AND NEIMARK, P.L.L.C. | | | | HECKENBERG JR, DONALD H |
| 624 NINTH STREET, NW | | | | |
| SUITE 300 | | | ART UNIT | PAPER NUMBER |
| WASHINGTON, DC 20001-5303 | | | 1722 | |

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|--------------------------------------|-------------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/830,070 | EBINA, TOSHIYUKI |
| | Examiner Donald Heckenberg | Art Unit 1722 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on ____.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-5 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-5 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 23 April 2004 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ~.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ .
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____

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1. The abstract of the disclosure is objected to because it is too long. The abstract must be less than 150 words. Correction is required. MPEP § 608.01(b).

2. The disclosure is objected to because of the following informalities:

The specification at paragraph 14 refers to "50 im" and "100 im." As discussed below in the rejection under 35 U.S.C. 112, second paragraph, an "im" is not a recognized unit of measure. Appropriate correction is required.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 3 and 4 refer to things in "im" units of measure. For example, claim 3, line 20 refers to "30-60 im." An "im" is

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not a recognized unit of measure, and the specification does not define how this relates to any other unit of measure.

It is noted, however, that Japanese App. No. 2003-137247, to which the instant application claims priority, refers to units of measure in microns (or "μm"). Also, it seems that the micron scale is generally what would be applicable to the features referred to in the claim and in the art in general. Therefore, the references to "im" will be interpreted in the rest of this Office Action as referring to a microns. However, appropriate and clarification and correction is required.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Pub. No. 10-302328. The abstract of this document has previously been made of record in the I.D.S. filed on April 23, 2004. Reference below will be made to the drawings of this document as well as the computer translation of the reference made of record with this Office Action.

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JP '328 discloses an optical disc molding device in which a stamper (111) is held by a die (2). In the embodiment depicted in Figure 3, the stamper (111) includes a held surface which diverges continuously from an inner circumferential surface of a center hole to an inner circumferential side head surface (see Fig. 3). An inner stamper holder (119) is provided that holds the inner circumferential side of the stamper. The stamper holder includes a cylindrical body portion and a claw portion (115) formed around an outer circumference of an end of the cylindrical body portion (see Fig. 3). The claw portion includes a cavity forming surface (116) is substantially parallel to the inner circumferential side head surface of the stamper. The claw portion further includes a holding surface (117) that diverges toward the cavity in a tapered fashion and presses the held surface of the stamper. The inner stamper holder's cylindrical body portion also includes a cylindrical surface that is opposed to the inner circumferential surface of the stamper (see Fig. 3).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP '328.

JP '328 discloses the apparatus as described above. JP '328 does not disclose the holding surface of the claw portion to have an arcuate cross section. The reference, however, discloses different shapes for the holding surface of the claw portion including a tapered surface (see Fig. 3) and straight surfaces (see Fig. 4). An arcuate surface would be merely a different shape, somewhere between using a tapered surface as in Fig. 3 and straight surfaces as in Fig. 4, which would still

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function to hold the stamper. Therefore, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have modified the apparatus disclosed by JP '328 as such to have an arcuate shaped holding surface of the claw portion because this would be another shaped surface that is similar to the disclosed shapes of JP '328 which would still function to hold the stamper. Note further, this modification would require merely a change in the shape of the apparatus structure. Normally, a change in the form or shape of a prior art structure is seen as an obvious modification to one of ordinary skill in the art unless it can be shown there is a new and unexpected result. In re Dailey, 357 F.2d 669, 672-73, 149 USPQ 47, 50 (CCPA 1966).

10. Claims 3-5 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action. Note the interpretation that has been given to these claims as described above.

11. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to teach or suggest a die for molding disc substrates as defined in claim 3. The closest

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prior art disclosed by JP '328 is described above. JP '328 fails to teach or suggest the claw portion having an outer circumferential portion that is projected 30 - 60 μm from a cylindrical surface of the cylindrical body portion at room temperature, or a holding surface with a base portion of 50 - 150 μm in the axial direction at room temperature as recited in claim 3.

12. The following references cited but not relied upon are deemed pertinent to the instant application:

Matey (U.S. Pat. No. 4,447,381) discloses an apparatus for making a video disc.

McNeely (U.S. Pat. No. 4,532,095) discloses a method for making a disc from a disc preform.

Ebina (U.S. Pat. No. 5,849,225) discloses a disc base molding method and apparatus therefor.

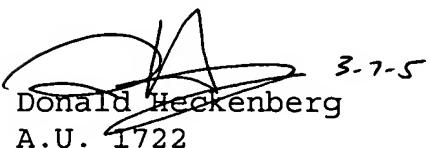
Koyama et al. (U.S. Pat. App. No. 2004/0191352) discloses a stamper holder, mold component, and mold assembly.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Heckenberg whose telephone number is (571) 272-1131. The examiner can normally be reached on Monday through Friday from 9:30 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin Utech, can be reached at (571) 272-1137. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).


3-7-5
Donald Heckenberg
A.U. 1722